We Claim:

1. A method of using radio frequency waves to imitate the presence of a catalyst and artificially create catalytic action in a catalyst-free chemical reaction comprising:

transmitting radio frequency waves through the reaction mixture at a signal strength sufficient to electronically reproduce the effect of the physical presence of a selected catalyst,

wherein the radio frequency waves have a selected transmission frequency substantially equal to the signal frequency of said selected catalyst as determined by nuclear magnetic resonance.

2. A method according to claim 1 comprising:

fine tuning the transmission frequency while monitoring the reaction to optimize the reaction.

3. A method according to claim 1 comprising:

fine tuning the signal strength while monitoring the reaction to optimize the reaction.

4. A method according to claim 1 wherein the catalyst-free chemical reaction is electrolysis carried out within an electrolytic cell comprising a cathode and an anode each communicating with a source of electrical current and each immersed in an electrolyte substance.

5. A method according to claim 4 wherein the radio frequency waves are transmitted via a standing wave antennae submerged in the electrolyte.

6. A method according to claim 5 wherein the electrolytic cell is housed within a conduit and electrolyte is pumped through the conduit.

7. A method according to claim 6 further including the step of regulating the temperature of the electrolyte to optimize the reaction.

8. A method according to claim 6 wherein the electrolyte is water and the reaction comprises electrolysis to increase the dissolved oxygen gas within the water.

9. A method according to claim 8 further including the step of monitoring the dissolved oxygen concentration of the water passed from the electrolytic cell.

10. A method according to claim 1 wherein the selected catalyst is selected from the group consisting of: platinum; rhenium; iridium; and ruthenium.

11. A method according to claim 10 wherein the selected catalyst is platinum and the transmission frequency is in the order of 9.29 megahertz.

12. A method of using radio frequency waves to imitate the presence of an inert metallic catalyst and artificially create catalytic action in a catalyst-free chemical reaction comprising:

transmitting radio frequency waves through the reaction mixture at a signal strength sufficient to electronically reproduce the effect of the physical presence of a selected inert metallic catalyst,

wherein the radio frequency waves have a selected transmission frequency substantially equal to the signal frequency of said selected inert metallic catalyst as determined by nuclear magnetic resonance.

13. The method of claim 12 comprising:

fine tuning the transmission frequency while monitoring the reaction to optimize the reaction.

14. The method according to claim 12 comprising:

fine tuning the signal strength while monitoring the reaction to optimize the reaction.

15. The method according to claim 12, wherein the catalyst-free chemical reaction is electrolysis carried out within an electrolytic cell comprising a cathode and an anode, each communicating with a source of electrical current and each immersed in an electrolyte substance.

16. The method according to claim 15, wherein the radio frequency waves are transmitted via a standing wave antennae submerged in the electrolyte.

17. The method according to claim 16, wherein the electrolytic cell is housed within a conduit and electrolyte is pumped through the conduit.

18. The method according to claim 17, further including the step of regulating the temperature of the electrolyte to optimize the reaction.

19. The method according to claim 17, wherein the electrolyte is water and the reaction comprises electrolysis to increase the dissolved oxygen gas within the water.

20. The method according to claim 19, further including the step of monitoring the dissolved oxygen concentration of the water passed from the electrolytic cell.

21. The method according to claim 12, wherein the selected catalyst is selected from the group consisting of platinum, rhenium, iridium, and ruthenium.

22. The method according to claim 21, wherein the selected catalyst is platinum and the transmission frequency is in the order of 9.29 megahertz.

23. Super-oxygenated water comprising stabilized dissolved oxygen atom at a concentration of greater than 9.5 milligrams per litre

24. A medicinal solution containing super-oxygenated water as defined in claim 23, said solution being selected from the group consisting of: intravenous solution; electrolytic solution; saline solution; topical burn solution; topical skin treatment solution; oral rinse treatment solution; dental rinse treatment solution; ingestible blood oxygen content elevating solutions; ingestible blood oxygen partial pressure elevating solutions; bactericide; virus killing solution; anaerobic tumour treatment solution; physical injury immersion treatment solution; and brain tissue treatment solution.

25. A medicinal solution as defined in claim 24, wherein said solution is saline solution.

26. A preservative containing super-oxygenated water as defined in claim 23, said preservative being selected from the group consisting of fluid preservative; ice for use as a cooling preservative; live human organ preservative; and live human tissue preservative.

27. The use of super-oxygenated water as defined in claim 23 for the manufacture of a medicinal solution selected from the group consisting of: intravenous solution; electrolytic solution; saline solution; topical burn solution; topical skin treatment solution; oral rinse treatment solution; dental rinse treatment solution; ingestible blood oxygen content elevating solutions; ingestible blood oxygen partial pressure elevating solutions; bactericide; virus killing solution; anaerobic tumour treatment solution; physical injury immersion treatment solution; and brain tissue treatment solution.

28. The use of super-oxygenated water as defined in claim 23 for the manufacture of a preservative selected from the group consisting of: fluid preservative; ice used as a cooling preservative; live human organ preservative; and live human tissue preservative.